

PROJECT DESCRIPTION

I. GENERAL

THIS PROJECT INVOLVES THE INSTALLATION OF APS PUSHBUTTONS, PEDESTAL POLES, COUNTDOWN PEDESTRIAN SIGNALS AND SCHOOL CROSSING SIGNS AT THE INTERSECTION OF MD 500 AND MD 501 AS PART OF A SIDEWALK UPGRADE IN PRINCE GEORGE'S COUNTY. MD 500 IS ASSUMED TO RUN IN AN EAST/WEST DIRECTION.

II. INTERSECTION OPERATION

THE INTERSECTION IS OPERATING IN A FULLY ACTUATED MODE USING SIX NEMA PHASES. EASTBOUND AND WESTBOUND MD 500 RUN CONCURRENTLY. AN EXCLUSIVE LEFT TURN PHASE IS PROVIDED FOR EASTBOUND AND WESTBOUND MD 500 (QUEENS CHAPEL ROAD). NORTHBOUND AND SOUTHBOUND MD 501 (CHILLUM ROAD) ARE SPLIT-PHASED.

III. PEDESTRIAN OPERATION

PART A
NAVIGATOR AUDIBLE PEDESTRIAN PUSHBUTTON MOVEMENTS TO CROSS THE EAST, WEST, NORTH AND SOUTH LEGS OF THE INTERSECTION ARE TO BE PROVIDED. WHEN THE PEDESTRIAN LOCATES AND PRESSES THE BUTTON FOR AN EXTENDED TIME, THE PUSH BUTTON UNIT WILL ANNOUNCE THE FOLLOWING MESSAGE:
NORTH: "WAIT TO CROSS CHILLUM AT QUEENS CHAPEL. WAIT."
SOUTH: "WAIT TO CROSS CHILLUM AT QUEENS CHAPEL. CROSSWALK ANGLES LEFT. WAIT."
EAST: "WAIT TO CROSS QUEENS CHAPEL AT CHILLUM. CROSSWALK ANGLES RIGHT. WAIT."
WEST: "WAIT TO CROSS QUEENS CHAPEL AT CHILLUM. WAIT."

PART B
WHEN WALK PHASE BEGINS, THE MESSAGE WILL BE RAPID TICK, WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.

NOTES

1. THE CONTACT PERSONS FOR THIS PROJECT ARE AS FOLLOWS:

PROJECT CONTACTS:

DISTRICT 3

MS. FELICIA MURPHY, ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (301) 513-7358
MR. DUANE BERNDARD, ASSISTANT DISTRICT ENGINEER - CONSTRUCTION
PHONE: (301) 513-7336
MR. VERNON STINNETT, ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: (301) 513-7304
MR. VICTOR GRAFTON, UTILITY ENGINEER
PHONE: (301) 513-7350

OFFICE OF TRAFFIC AND SAFETY

MR. RICHARD DAFF SR.,
CHIEF, TRAFFIC OPERATIONS
410-787-7630
MR. ROBERT SNYDER
ASSISTANT DIVISION CHIEF, TRAFFIC OPERATIONS
410-787-7630
MR. ED RODENHIZER
TEAM LEADER SIGNAL OPERATIONS
410-787-7650
MR. EUGENE BAILEY
TEAM LEADER SIGN OPERATIONS
410-787-7670
MS. DARLENE EIDE
SUPPLY OFFICER IV (SIGNAL SHOP WAREHOUSE)
410-787-7668

2. MAINTENANCE OF TRAFFIC WILL BE HANDLED BY THE CONTRACTOR UTILIZING THE FOLLOWING STANDARD PLATES FOR TRAFFIC CONTROL: 104.03-10, 104.03-12, 104.03-14, 104.04-13, 104.04-15, OR AS DIRECTED BY THE ENGINEER.

EQUIPMENT LIST

- A. EQUIPMENT TO BE FURNISHED BY STATE HIGHWAY ADMINISTRATION.

CATEGORY	DESCRIPTION
CODE NO.	

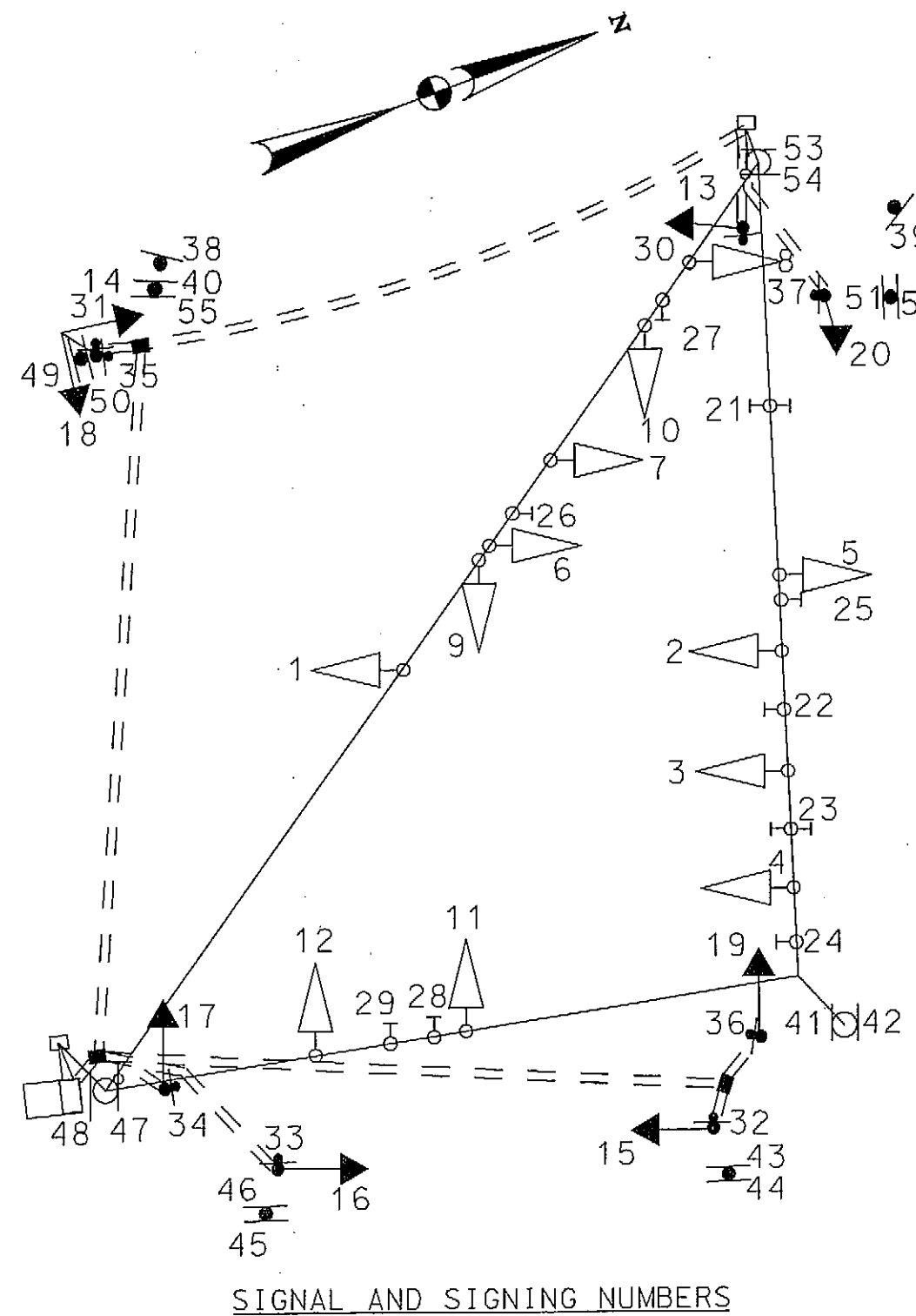
NONE

- B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

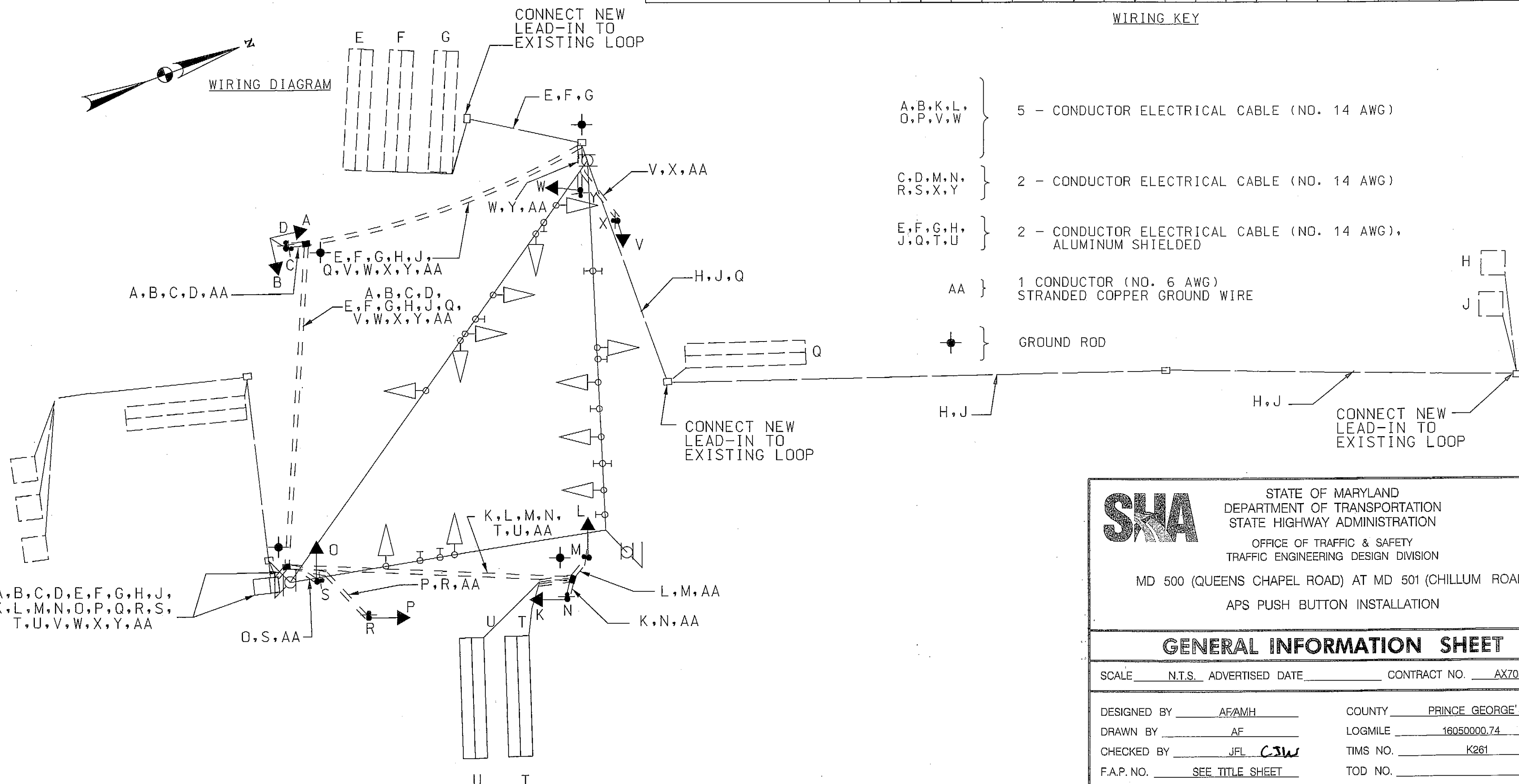
CATEGORY	DESCRIPTION	UNITS	QUANTITY
CODE NO.			
114280	REMOVAL OF EXISTING PAVEMENT MARKING LINES, ANY WIDTH	LF	1340
120500	MAINTENANCE OF TRAFFIC	LS	1
201032	CLASS 2 EXCAVATION	CY	1
203030	TEST PIT EXCAVATION	CY	4
585405	5 INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS	LF	100
585412	12 INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS	LF	1800
585408	10 INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS	LF	400
585625	24 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKINGS	LF	140
585627	WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LEGEND AND SYMBOLS	SF	24
655105	5 INCH CONCRETE SIDEWALK	SF	60
800000	AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION AND SIGN	EA	8
800000	BREAKAWAY PEDESTAL POLE - ANY SIZE	EA	7
800000	FURNISH AND INSTALL 2 WIRE CONTROL UNIT	EA	1
800000	16 INCH LED COUNTDOWN PEDESTRIAN SIGNAL HEAD	EA	8
800000	PEDESTRIAN EDUCATION SIGN	EA	8
800000	REMOVE AND DISPOSE PER ASSIGNMENT	EA	1
801104	WOOD SIGN SUPPORTS 4 INCH X 4 INCH	LF	11
802501	NO.6 AWG STRANDED BARE COPPER GROUND WIRE	LF	380
805135	3 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED	LF	150
811001	FURNISH AND INSTALL ELECTRICAL HANDHOLE	EA	3
813023	RELOCATE EXISTING GROUND MOUNTED SIGNS	SF	11
837001	GROUND ROD-3/4 INCH DIAMETER X 10 FOOT LENGTH	EA	4
861105	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)	LF	1100
861107	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)	LF	1100
862101	LOOP WIRE ENCASED IN FLEXIBLE TUBING	LF	850
862102	SAW CUT FOR SIGNAL (LOOP DETECTOR)	LF	225
805155	4 INCH SCHEDULE 80 RIGID PVC CONDUIT -SLOTTED	LF	260
805160	1 INCH LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT	LF	15
801105	WOOD SIGN SUPPORTS 4 INCH X 6 INCH	LF	110
801605	SHEET ALUMINUM SIGNS	SF	190
805140	4 INCH SCHEDULE 80 RIGID PVC CONDUIT -TRENCHED	LF	10
813010	BAND SIGN TO SUPPORT	EA	20
861104	ELECTRICAL CABLE - 2 CONDUCTOR, ALUMINUM SHEILDED	LF	2200

SHEET ALUMINUM SIGNS CONSIST OF THE FOLLOWING:

S1-1 (36"x36") SIGN, 4"x6" WOOD POST (DRILLED) MOUNT SIGN- 11 EACH
W16-7pR (24"x12") SIGN, 4"x6" WOOD POST (DRILLED) MOUNT SIGN- 7 EACH
W16-7pL (24"x12") SIGN, 4"x6" WOOD POST (DRILLED) MOUNT SIGN- 4 EACH
S1-1 (36"x36") SIGN, BAND TO POLE - 6 EACH
W16-7pR (24"x12") SIGN, BAND TO POLE - 3 EACH
W16-7pL (24"x12") SIGN, BAND TO POLE - 3 EACH
OM1-3 (18"x18") 4"x4" WOOD POLE MOUNT - 1 EACH



SIGNAL AND SIGNING NUMBERS



PHASE CHART

PHASE 1 AND 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
PHASE 1 & 5 CHANGE	←	←	R	R	←	←	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 1 AND 6	←	←	G	G	←	←	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
1 AND 6 CHANGE	←	←	Y	Y	←	←	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 2 AND 5	←	←	R	R	←	←	G	G	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
2 AND 5 CHANGE	←	←	R	R	←	←	Y	Y	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 2 & 6	←	←	G	G	←	←	G	G	R	R	R	R	WK	WK	WK	WK	DW	DW	DW	DW
PEDESTRIAN CLEARANCE	←	←	G	G	←	←	G	G	R	R	R	R	FLDW	FLDW	FLDW	FLDW	DW	DW	DW	DW
2 & 6 CHANGE	←	←	Y	Y	←	←	Y	Y	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 3	←	←	R	R	←	←	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 3 CHANGE	←	←	R	R	←	←	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 3 ALT.	←	←	R	R	←	←	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	WK	WK
PEDESTRIAN CLEARANCE	←	←	R	R	←	←	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	FLDW	FLDW
PHASE 3 ALT. CHANGE	←	←	R	R	←	←	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 4	←	←	R	R	←	←	R	R	R	R	R	R	G	DW	DW	DW	DW	DW	DW	DW
PHASE 4 CHANGE	←	←	R	R	←	←	R	R	R	R	R	R	Y	DW	DW	DW	DW	DW	DW	DW
PHASE 4 ALT.	←	←	R	R	←	←	R	R	R	R	R	R	G	DW	DW	DW	DW	WK	WK	DW
PEDESTRIAN CLEARANCE	←	←	R	R	←	←	R	R	R	R	R	R	G	DW	DW	DW	DW	FLDW	FLDW	DW
PHASE 4 ALT. CHANGE	←	←	R	R	←	←	R	R	R	R	R	R	Y	DW	DW	DW	DW	DW	DW	DW
FLASHING OPERATION	←	←	FY	FY	←	←	FY	FY	FY	FY	FY	FY	FR	DARK	DARK	DARK	DARK	DARK	DARK	DARK

WIRING KEY



STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
MD 500 (QUEENS CHAPEL ROAD) AT MD 501 (CHILLUM ROAD)
APS PUSH BUTTON INSTALLATION

GENERAL INFORMATION SHEET

SCALE N.T.S. ADVERTISED DATE CONTRACT NO. AX7035168

DESIGNED BY AF/AMH COUNTY PRINCE GEORGE'S

DRAWN BY AF LOGMILE 1605000.74

CHECKED BY JFL CSW TMS NO. K261

F.A.P. NO. SEE TITLE SHEET TOD NO.

TS NO. 677D-GI DRAWING TS-2 OF 2 SHEET NO. OF